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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/789,410

02/27/2004

Josef Hammer

HAMMER

5228

20151

7590

09/19/2006

HENRY M FEIEREISEN, LLC

350 FIFTH AVENUE

SUITE 4714

NEW YORK, NY 10118

EXAMINER

SUN, SCOTT C

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/789,410	Applicant(s) HAMMER ET AL.	
	Examiner Scott Sun	Art Unit 2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/27/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Specifically, the claims recite a "data bus profile" which is identical for external and internal buses. The claims further states that the external and internal buses are of different standards. Specifically, claim 1 recites that the external bus is Profibus, Ethernet bus, Firewire bus, Sercos bus or Profinet bus. Claim 5 then recites the internal parallel bus is a PCI bus. It is unclear how two buses of different standards can have identical "data bus profiles". For example, how does a PCI bus (32 or 64 bit parallel bus) have the same "data bus profile" as a USB bus (serial bus) when both the protocol and physical make-up of the two buses are different.

Data bus profile, as shown in the specification, appears to be the format of the data or the protocol. For example, paragraph 36 recites "the data bus profile describes the content, i.e., the meaning of a message, e.g. the employed data type (byte, word), and the significance (e.g., actual value, desired value, control word or status word)."

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The specification does not disclose any conversion circuitry or software, but simply that the same data bus profile are used for the external and internal buses.

Furthermore, claim 2 recites "I/O units being connected with the corresponding internal and external drives by the identical data bus profile" (emphasis added). It is unclear how the data bus profile, apparently being the format of the data (paragraph 36, figure 7), can function as a connector.

In view of the these deficiencies, examiner notes that "data bus profile" is not described in a way to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. For the purpose of continuing prosecution, the identical data bus profile will be interpreted to be any hardware or software that functions to allows two buses of different bus standards to communicate.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. The claims recite "internal" and "external" drives and buses without clarifying the relative positions of the devices. Therefore, it is unclear what elements the drives and buses are internal and external to. For the purpose of continuing prosecution, the positions of the drives and buses are interpreted to be arbitrary.

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6. The claims further recite a "data bus profile" which appears to be both a format of the data (as in claims 1 and 6) and a physical connector (as in claims 2 and 7). It is unclear what is the intended meaning of "data bus profile" and therefore the scope of the claim is unascertainable.

7. Claims 1, 5, 6, and 10 recite various trademarks including USB™, FireWire™, PCI™, etc... Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade names are used to identify/describe internal and external buses and, accordingly, the identification/description is indefinite. For the purpose of continuing prosecution, the internal bus and external bus will be interpreted to have different industry standard buses.

8. The following rejections are made based on the examiner's best interpretation of the claims in light of the 35 USC 112 rejections above.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Cromer et al (PG Pub #2003/0028765).

11. Regarding claim 1, Cromer discloses a data transmission system (figure 4) for machine tools or production machines, comprising: a controller (microprocessor 42); at least one internal drive (hard drive 54, diskette drive 56); at least one external drive (USB CD-RW drive 70); an internal parallel data bus (PCI bus 50) connecting the controller with the at least one internal drive and having an internal data bus profile; and an external data bus (USB bus) connecting the controller with the at least one external drive and having an external data bus profile identical (the two buses are exchanging data through the USB bridge) to the internal data bus profile (USB bridge to PCI bus); wherein the external bus is selected from the group consisting of Profibus, real-time Ethernet bus, USB bus, FireWire bus, Sercos bus, and Profinet bus (USB bus; paragraph 37). Examiner interprets that the PCI and USB buses having the same bus

profile because the USB bridge functions to enable communication between the two buses. Also see 112 rejections above.

12. Regarding claim 2, Cromer discloses claim 1 and further discloses wherein the internal drives and the external drives further comprises I/O units (drive interfaces), with the I/O units of the internal drives integrated in or externally connected to the internal drives, said I/O units being connected with the corresponding internal and external drives by the identical data bus profile (paragraph 37). Examiner notes that the various drives in Cromers teachings have the I/O units in order to communicate data in and out of the respective drives. Because these drives are connected to PCI and USB buses, the I/O units would communicate data using the respectively formats of these buses.

13. Regarding claim 3, Cromer discloses claim 1 and further discloses wherein the internal parallel data bus, the controller, and the at least one internal drives are logically configured in the same manner as the external data bus (through USB bridge 74, figure 4, paragraph 37). Examiner notes that the USB bridge 74 functions to connect and convert the USB bus to the PCI bus. Therefore from the microprocessor's perspective, the USB device is viewed as a PCI device having the same method of communication (logically) as devices on the PCI bus.

14. Regarding claim 4, Cromer discloses claim 1 and further discloses wherein the at least one internal drive and the at least one external drive are coupled with each other so as to exhibit at least one of clock synchronism, identical timing, and synchronized acquisition of an actual value (paragraph 47, figure 4). Examiner notes that the USB drive is connected to the PCI bus, and therefore data communication for the drives 54,

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56, and 70 share the same PCI bus. Data transfers on the shared PCI bus would be synchronized according to the PCI specification.

15. Regarding claim 5, Cromer discloses claim 1, and further discloses wherein the parallel bus is a PCI bus (figure 4, paragraph 37).

16. Claims 6-10 are substantially similar to claims 1-5 above. The same grounds of rejection are applied. Examiner notes that claim 6 differs slightly in that the external bus connects the external drive with the internal drive. As shown in figure 4, the USB drive 70 is connected to the drives 54 and 56 through the USB bus, USB bridge, and the PCI bus.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Sun whose telephone number is (571) 272-2675.


The examiner can normally be reached on M-F, 10:30am-7pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on (571) 272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SS



KIM HUYNH
SUPERVISORY PATENT EXAMINER
9/14/06